

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/840,400	04/23/2001	Randal Lee Bertram	RAL920000115US1	4490	
25299	7590	08/25/2004	EXAMINER		
IBM CORPORATION				YUSSUF, SAJID	
PO BOX 12195				ART UNIT	
DEPT 9CCA, BLDG 002				2141	
RESEARCH TRIANGLE PARK, NC 27709				PAPER NUMBER	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,400	BERTRAM ET AL.	
	Examiner	Art Unit	
	Sajid A Yussuf	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 April 2001 and 28 July 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-15 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 23 April 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____.
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)
 Paper No(s)/Mail Date 4/23/01. 6) Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- a. A person shall be entitled to a patent unless -
 - b. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. ***Claim(s) 1, 2, 4, 9-11, 13-15 is/are rejected under 35 U.S.C. 102(e) as being anticipated by Hoyer et al. (US Patent No. 6,339,750 and Hoyer hereinafter).***

5. As per claim(s) 1 Hoyer discloses (a) obtaining performance: data for a plurality of monitors for the at least one resource group, (See Column 8 Lines 17-50) (b) analyzing the performance data to determine whether performance of the system can be improved using the at least one resource group, (See Column 6 Lines 43-67); and (c) graphically displaying

Art Unit: 2141

performance data for at least one monitor of the plurality of monitors for the at least one resource group, (See Column 8 Lines 17-50).

6. As per claim(s) 2 Hoyer teaches the claimed invention as described in claim(s) 1 above and furthermore discloses (c) displaying the performance data for the at least one monitor on the plurality of nodes in a single graph, (See Column 18 Lines 1-13 & Figure 7).

7. As per claim(s) 4 Hoyer teaches the claimed invention as described in claim(s) 1-2 above and furthermore discloses plurality of monitors further include CPU utilization for the at least one resource group, (See Column 7 Lines 18-21).

8. As per claim(s) 9 Hoyer teaches the claimed invention as described in claim(s) 1-7 above and furthermore discloses (d) allowing a user to define the at least one resource group, (See Column 6 Lines 56-67).

9. As per claim(s) 10 Hoyer teaches the claimed invention as described in claim(s) 1-9 above and furthermore discloses (b1) determining whether performance of the system can be improved by moving the at least one resource group between the plurality of nodes, (See Column 6 Lines 43-67).

10. As per claim(s) 11 Hoyer teaches the claimed invention as described in claim(s) 1-10 above and furthermore discloses (b2) determining an optimal assignment to a node of the plurality of nodes for the at least one resource group, (See Column 6 Lines 28-67).

11. As per claim(s) 13 Hoyer discloses (a) obtaining performance data for a plurality of monitors for the at least one resource group, (See Column 8 Lines 17-58) (b) analyzing the performance data to determine whether performance of the system can be improved using the at least one resource group, (See Column 6 Lines 43-67); (c) graphically displaying

Art Unit: 2141

performance data for at least one monitor of the plurality of monitors for the at least one resource group, (See Column 8 Lines 17-50).

12. As per claim(s) 14 Hoyer discloses means for obtaining performance data for at least one resource group, the performance data relating to a plurality of monitors for the at least one resource group, (See Column 8 Lines 17-50) and for analyzing the performance data to determine whether performance of the computer system can be improved using the at least one resource group, (See Column 6 Lines 43-67); and a graphical user interface for displaying performance data for at least one monitor of the plurality of monitors for the at least one resource group, (See Column 8 Lines 17-50).

13. As per claim(s) 15 Hoyer teaches the claimed invention as described in claim(s) 14 above and furthermore discloses the obtaining and analyzing means further include a plurality of agents residing in the plurality of computer systems, (See Column 7 Lines 22-30).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

c. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- d. Determining the scope and contents of the prior art.
- e. Ascertaining the differences between the prior art and the claims at issue.
- f. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2141

g. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. *Claims 3, 5-8, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. (US Patent No. 6,339,750 and Hoyer hereinafter) in view of McKnight et al. (US Patent No. 6,557,035 and McKnight hereinafter).*

17. 3. As per claim(s) 3 Hoyer discloses the claimed invention as described above.

However, Hoyer does not explicitly teach plurality of monitors further include disk utilization for the at least one resource group.

McKnight teaches plurality of monitors further include disk utilization for the at least one resource group, (See Column 2 Lines 13-20).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Hoyer with the teachings of McKnight to include a plurality of monitors further include disk utilization for the at least one resource group with the motivation to provide for a method that predicts server hardware performance bottleneck by computing running averages of the measured server utilization parameter over selected time periods. The method uses a linear regressing analysis to determine a trend in the running averages and compares the trend to a threshold value for the server utilization parameter to predict the occurrence of a performance bottleneck, (See McKnight Column 2 Lines 21-27).

18. As per claim(s) 5 Hoyer discloses the claimed invention as described above.

However, Hoyer does not explicitly teach plurality of monitors further include memory utilization for the at least one resource group.

McKnight teaches plurality of monitors further include memory utilization for the at least one resource group, (See Column 2 Lines 13-20).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Hoyer with the teachings of McKnight to include a plurality of monitors further include memory utilization for the at

Art Unit: 2141

least one resource group with the motivation to provide for a method that predicts server hardware performance bottleneck by computing running averages of the measured server utilization parameter over selected time periods. The method uses a linear regressing analysis to determine a trend in the running averages and compares the trend to a threshold value for the server utilization parameter to predict the occurrence of a performance bottleneck, (See McKnight Column 2 Lines 21-27).

19. As per claim(s) 6-8 Hoyer discloses the claimed invention as described above.

However, Hoyer does not explicitly teach plurality of monitors further include network utilization, LAN utilization, and interconnect utilization for the at least one resource group.

McKnight teaches plurality of monitors further include network utilization for the at least one resource group; wherein Examiner interprets network utilization, LAN utilization, and interconnect utilization as terms that have the same concept and are related to the concept of a network, (See Column 2 Lines 13-20).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Hoyer with the teachings of McKnight to include a plurality of monitors further include network utilization for the at least one resource group with the motivation to provide for a method that predicts server hardware performance bottleneck by computing running averages of the measured server utilization parameter over selected time periods. The method uses a linear regressing analysis to determine a trend in the running averages and compares the trend to a threshold value for the server utilization parameter to predict the occurrence of a performance bottleneck, (See McKnight Column 2 Lines 21-27).

20. As per claim 12 Hoyer discloses the claimed invention as described above.

However, Hoyer does not explicitly teach forecasting a bottleneck for the monitor of the plurality monitors.

McKnight teaches forecasting a bottleneck for the monitor of the plurality monitors, (See Column 2 Lines 13-20).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Hoyer with the teachings of McKnight to include forecasting a bottleneck for the monitor of the plurality monitors with the motivation to provide for a method that predicts server hardware performance bottleneck by computing running averages of the measured server utilization parameter over selected time periods. The method uses a linear regressing analysis to determine a trend in the running averages and compares the trend to a threshold value for the server utilization parameter to predict the occurrence of a performance bottleneck, (See McKnight Column 2 Lines 21-27).

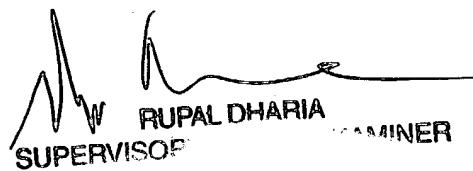
Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - h. Haggard et al. (US Patent No. 6,148,335) discloses performance/capacity management framework over many servers;
 - i. Casper et al. (US Patent No. 6,505,248) discloses method and system for monitoring and dynamically monitoring and dynamically reporting status of a remote server; and
 - j. Fleming, III (US Patent No. 6,230,204) discloses method and system for estimating usage of computer resources;
22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajid A Yussuf whose telephone number is (703) 305-8752. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM and Alternate Fridays.
23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2141

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sajid Yussuf
Patent Examiner
Technology center 2100
20 August 2004



RUPAL DHARIA
SUPERVISOR EXAMINER